

CLAIMS

1. A birth simulator having an interactive optical display, wherein the birth simulator comprises:
 - a womb torso (1) joined to a base (3),
 - a child model (2) placed inside the womb torso (1), wherein preferably, the natural shape and size proportions are kept and haptics is realized,
 - a force/moment sensor arrangement (6), which connects the child model (2) to the base (3) in a fixed manner, wherein said force/moment sensor arrangement (6) is configured for detecting forces and moments, which an examining individual (5) exerts onto the child model (2) by the hands or by using medical instruments, and for providing the results of this detection in the form of measurement signals, wherein the forces and moments are exerted to the child model directly or via the flexible abdominal wall of the womb torso (1) indirectly,
 - a display screen (7) and
 - a programmable evaluation device, which has a computer and is connected to the force/moment sensor arrangement (6) and to the display screen (7) via a signal path, wherein
a simulation program implemented into the computer is configured so that the measurement signals are transformed into image signals which depict, in real time, in a slow motion or a time compression modus, the natural movement behavior of a child in the womb as adequate reaction movements of the action of the exerted forces and movements such as a natural child would behave inside the womb of mother during a certain examination or a certain period of birth.
2. A birth simulator according to claim 1, characterized in that the child model is detachably fixed to the force/moment sensor arrangement (6) and the womb torso (1) comprises a flap.

3. A birth simulator according to claim 2, characterized in that the child model can be fixed to the force/moment sensor arrangement (6) in different presentations.
4. A birth simulator according to claim 1, characterized in that one sound generator (8) at least for generating typical sounds, which are given by mother or child or produced by medical instruments during a natural birth, is connected to the evaluation device via a signal path.
5. A birth simulator according to claim 4, characterized in that the sound generator (8) is arranged inside the womb torso (1) or the child model (2).
6. A birth simulator according to claim 1, characterized in that a signal and reference program is implemented in the computer, which causes operating instructions, simulated physiologic values, device outputs and alarms to be displayed on the screen.
7. A child model for a birth simulator according to any of the preceding claims, characterized in that force and/or pressure sensors (9, 10) are arranged in the neck or skullcap area of the child model (2), which is made of formable segments, and connected to the evaluation device via a signal path.